

RECORD OF DECISION

Stehekin River Corridor Implementation Plan Final Environmental Impact Statement

Lake Chelan National Recreation Area
North Cascades National Park Service Complex
Chelan County, Washington

SUMMARY

The Department of the Interior, National Park Service (NPS) prepared this Record of Decision (ROD) on the *Stehekin River Corridor Implementation Plan / Final Environmental Impact Statement* (henceforth, SRCIP/FEIS) for Lake Chelan National Recreation Area. The Federal Highway Administration (FHWA), a cooperating agency, will prepare a separate Record of Decision to document their decision to fund and implement certain actions pertaining to the Stehekin Valley Road Improvement Project, which is a major part of the approved Stehekin River Corridor Implementation Plan. This Record of Decision includes a description of the Selected Action, synopses of other alternatives considered, the basis for the decision and identification of the environmentally preferable alternative, and an overview of public involvement in the decision-making process. A determination of non-impairment rendered solely by the NPS is provided as Attachment A, and measures to minimize environmental harm are documented in Attachment B. Also attached is the Statement of Findings for Floodplains.

DECISION (SELECTED ACTION)

The NPS in coordination with the FHWA will implement Alternative 5, *At-Risk Public Facilities Removed from Channel Migration Zone where Possible; Priority Land Exchange/Acquisition in Most Vulnerable Areas*. This Selected Action, identified and analyzed as the Preferred Alternative (Alternative 5) in the SRCIP/FEIS, was slightly modified from the identified preferred alternative (Alternative 2) analyzed in the Draft EIS to address public comments and incorporate additional design modifications.

The Selected Action will be implemented in response to a series of flood and erosion threats, which appear to be caused by a shift in the magnitude and frequency of flooding on the Stehekin River. The Selected Action was developed using the best available science and informed by years of monitoring data from the Stehekin watershed. The Selected Action was reviewed by a Technical Committee composed of regional experts in the field of river management from a variety of federal, state, and local agencies.

The Selected Action will use the channel migration zone of the river, rather than a model-based floodplain, to guide management actions. The Selected Action will minimize use of erosion protection measures through floodplain utilization, which encourages floodwaters to spread out across the floodplain rather than being constrained by dikes, levees, or other structural flood control techniques. This approach will allow the Stehekin River to flow freely within its channel migration zone by relocating public and administrative infrastructure at risk from further flood damage. The Selected Action will also encourage private development to relocate from flood hazard areas by implementing the 2012 Land Protection Plan and emphasizing land exchanges. These actions will sustainably operate and maintain NPS administrative facilities, public access (roads and trails), and campgrounds; protect water quality, scenic values, habitat, and natural processes of the Stehekin River; and provide partnership opportunities for the Stehekin Community in providing some services, facilities, and experiences for visitors.

The following sections summarize the key actions the NPS will implement. Complete details are provided in the SRCIP/FEIS:

Stehekin Valley Road Improvement

- Resurface the paved portion of the Stehekin Valley Road from the Ferry Landing to Harlequin Bridge (Milepost 4.9).
- Pave the Stehekin Valley Road from Harlequin Bridge to milepost 9.2. Road paving will reduce maintenance costs, limit gravel consumption, reduce dust, and enhance recreational opportunities.
- Stabilize the road shoulder in the vicinity of Frog Island (Milepost 3.8) with 1-2 bank barbs to prevent erosion and maintain vehicle access.
- Stabilize the road in the vicinity of Wilson Creek (Milepost 5.3) by (a) constructing 3-4 rock barbs; (b) rebuilding the road prism and regrading the slope from the ordinary high water mark to the road shoulder; and (c) shifting the road 0-20 feet away from the river. This action will require procurement of an easement from a private landowner (tract 07-142; Chelan County Tax ID# 331716140050) for construction and future maintenance of the bank barbs. The landowners have indicated they may be willing to grant this easement, however the easement is not assured. If the easement cannot be obtained, then no road work will occur in the vicinity of Wilson Creek. This scenario may require emergency action to stabilize or repair the road in the future.
- Reroute a 1.9 mile segment of the Stehekin Valley Road (from approximately Milepost 5.7 to 7.5) around the flood-prone McGregor Meadows area. Stabilize a portion of the rerouted road adjacent to private land (tract 07-157; Chelan County Tax ID #331709330050) with an approximately 230-foot long Mechanically Stabilized Earth (MSE) wall of varying height to minimize the overall width of the road prism on this relatively steep slope. Provide a guardrail and turnouts as needed for vehicle safety and to enable reasonable traffic flow, including snow removal. The final design for the road and construction timelines will be completed in coordination with FHWA. Mitigation of construction-related impacts is fully described in the attached “Measures to Minimize Environmental Harm.”
- Construct an approximately 1200’ long spur road from the road reroute into McGregor Meadows to provide motor vehicle access to McGregor Meadows for public and administrative purposes (this spur road is referred to as the “Reroute Access Connector” in the SRCIP/FEIS). Residents of McGregor Meadows may also use this road for motor vehicle access to private property. The spur road may be constructed and maintained in partnership with landowners in McGregor Meadows. The NPS will need to obtain an easement to construct the spur road across private land (tract 07-201; Chelan County Tax ID #331709340300). The landowner has indicated a willingness to provide this easement. NPS policies regarding motor vehicle access to McGregor Meadows are provided in the following section on “Road Maintenance and Motor Vehicle Access.”
- Retain a 0.75 mile segment of the existing Stehekin Valley Road from Milepost 5.7 to the last parcel of private property within McGregor Meadows. This segment of road follows an unsustainable alignment within the McGregor Meadows floodplain. The NPS will continue to conduct routine maintenance on this section of roadbed at its discretion. When flooding damages the road and routine repairs are no longer practicable, the road will be abandoned. If feasible following abandonment, the NPS may convert this abandoned section of road into a trail for non-motorized recreational use (pedestrians, horses, and bicycles) and non-motorized access to private property within McGregor Meadows.
- Convert the abandoned segment of the Stehekin Valley Road to a segment of the lower Stehekin Valley Trail from approximately milepost 6.8 to milepost 7.5. This trail segment will be for pedestrians, horses, and bicycles. It will also be used for administrative access to maintain the existing grade control structures in the vicinity of milepost 7.0. These existing grade control structures will be maintained until no longer practicable. No new erosion control structures will be built along this section of road.

- Construct a small public parking site and turnaround in the vicinity of the intersection of the new McGregor Meadows spur road and the Stehekin Valley Road to provide motor vehicle access to public land within McGregor Meadows.
- Stabilize the raveling slope in the vicinity of Milepost 8.0, and maintain the road in its existing alignment. The unstable slope will be scaled to remove large rocks, regraded to remove the upper brow, and stabilized at the toe with a rock wall. Erosion protection measures, including maintenance of bank barbs and related measures, will be implemented as needed in the future to protect the road (adaptive management).
- Raise the road grade, realign an unnamed creek, and install a box culvert near Milepost 8.5. At the request of the adjacent landowner, who did not wish to grant the NPS an easement or temporary authorization for work on private land, the design will be shifted slightly southward instead of being constructed partly on private property (tracts 08-105 & 08-106; Chelan County Tax ID # 331707250055). This will ensure that construction and future maintenance of the culvert occurs on public land and will avoid the need for landowner authorization to periodically maintain the culvert.
- Install a winter turnaround at Milepost 9.2, elevate 300 feet of the road in this area by approximately 3 vertical feet, install a low-water concrete plank crossing, and excavate an outlet channel between the low-water crossing and the Stehekin River. This turnaround will enable snow plowing and parking for winter recreational activities.

Road Maintenance and Vehicle Access

- Ongoing maintenance of the Stehekin Valley Road will continue, including cyclic, season, and routine maintenance activities. The existing array of erosion protection measures along the Stehekin Valley Road will continue to be maintained and replaced if necessary to protect the road.
- In partnership with landowners in McGregor Meadows, the NPS may enter into an agreement with property owners to facilitate installation of four new grade control structures across the Stehekin Valley Road beneath three driveways and from the Stehekin Valley Road to the new spur road. The NPS will provide technical assistance (e.g. design and permitting assistance) to property owners for construction of the grade control structures. Because the NPS is prohibited from spending public money to protect private property, the property owners will assume the responsibility for funding and installing these grade control structures on private land.
- The NPS will continue to maintain the Company Creek Road in its existing alignment at its discretion, subject to the availability of appropriated funds. The NPS will continue to perform regular maintenance of the road surface, including a variety of seasonal work, such as snowplowing and debris removal. The NPS will continue to maintain and repair as necessary the array of erosion protection measures along the upper Company Creek Road.
- The NPS will attempt to continue to enable motor vehicle access to private property where it presently exists, but cannot ensure motor vehicle access will be provided in perpetuity given the uncertainty associated with the location and magnitude of future flood damage.
- If future flooding precludes motor vehicle access to private land from the public road system, then the NPS will evaluate the potential for providing alternative motor vehicle access across public land on a case by case basis.

Administrative Facility Relocation

- Relocate the Maintenance Facility north of the Airstrip to avoid future flood damage to the facility and to protect the riparian functions and values of the Stehekin River. Once the facility is relocated, the abandoned area will be rehabilitated.
- Replace the Fire Cache and one 3-bedroom employee housing unit.
- Develop a site-specific environmental analysis for the relocation and replacement of these administrative facilities (expected to begin in summer or fall 2013).

Riparian Restoration, Erosion Protection and Woody Debris Management

Protecting the natural processes of the Stehekin River is an important goal which guides this implementation plan. Natural processes include channel migration, shoreline erosion and accretion, and recruitment and dispersal of woody and organic debris within the river. Preserving these processes will help protect the ecological integrity of the Stehekin River and its riparian zone and sustain public recreational use and enjoyment of Lake Chelan NRA.

In those areas where erosion control and woody debris management will be needed, the NPS will only use habitat-sensitive techniques such as bank barbs, log jams and bioengineering. To offset the adverse effects of erosion control, the NPS will restore previously degraded areas along the shoreline of the Stehekin River by implementing the following management actions:

- Install rock barbs, engineered log jams, and grade-control structures at several sites to stabilize erosion-prone sections of the Stehekin Valley Road where the road cannot be relocated from the floodplain and channel migration zone of the Stehekin River.
- Replace approximately 100 feet of riprap previously installed along the shoreline upstream of the Stehekin River Resort with three rock barbs and bioengineering.
- Stabilize the riverbank and enhance the riparian zone with planting and bioengineering at the Lower Field, Buckner Homestead hayfield and pasture, Wilson Creek, Frog Island, and the river mouth near Weaver Point. The total wetland/riparian acreage restored will be approximately 4.6 acres.
- Remove logjams in the vicinity of public roads and bridges where they pose a clear and present danger to the public transportation system.
- Manipulate woody debris in logjams within the backwater zone of the lower Stehekin River (defined as 0.25 mile from the head of the lake at full pool), where manipulation of lake levels has been shown to influence flooding and deposition of gravel and wood. Woody debris removal will be authorized in emergencies to protect the Stehekin Valley Road and to prevent flooding within the densely developed area at the head of the lake.
- Procure woody debris floating in Lake Chelan after flood events and from the tops of logjams within the backwater zone under specific site prescriptions for administrative uses, such as erosion management.
- Provide wood from the backwater zone of the lower Stehekin River to landowners and residents seeking to conduct agency-permitted erosion management, install advance flood protection measures, and/or restore the riparian zone.

Recreational Facility Enhancements

The following actions will be implemented on a case by case basis, in phases as funding permits, to improve recreational use and enjoyment and mitigate environmental hazards:

- Construct a trail from the Stehekin Landing to High Bridge for horses and hikers as proposed in the 1995 GMP. A segment of this trail will be constructed along the abandoned section of road through McGregor Meadows, and cyclists will be allowed to use this section of trail because it will be converted from a road (which presently allows cyclists) to a multi-use trail. Trail construction will occur in phases or segments over time, as funding and resources become available for implementation.
- Construct additional group and individual campsites at Purple Point Horse Camp to offset the loss in camping capacity when Harlequin Campground is closed due to seasonal flooding.
- Construct a raft takeout upstream of the Stehekin River Resort (near the mouth of the Stehekin River) to enhance river-related pursuits such as rafting and fishing. A small parking area and an access road will be constructed from the Stehekin Valley Road to this site.
- Construct a small walk-in campground (3-4 sites) adjacent to the parking and day use area for Rainbow Falls. The camping area will be partially shielded from the Stehekin Valley Road and the

Rainbow Falls parking area. The restroom facilities at Rainbow Falls will be upgraded to support the campground, and picnic tables and fire rings will be provided for each site. Potable water will not be provided, however non-potable water can be obtained from Rainbow Creek.

- Construct a footbridge across the Stehekin River, slightly upstream of Boulder Creek, to provide more direct recreational access to the Stehekin River Trail and camping facilities such as Weaver Point.
- Construct a small parking area at the terminus of the McGregor Meadows access road to enable public access to the Stehekin River Trail and the adjacent river.
- Convert the existing Bullion Camp to a day use area to avoid the hazard tree threat in this area, and move the two campsites across the road and downstream from the raft launch to maintain existing camping capacity in a safer location.
- Because the Selected Action includes the reroute of the Stehekin Valley Road along the Lower Field, the direction of existing targets on the shooting range will be toward the road, creating a safety hazard. As a result, the shooting range will be removed and restored or used for the reroute. No replacement shooting range will be constructed. NPS Management Policies discourage establishment of new ranges on public land because of the potential for lead contamination and other concerns.

Land Protection Plan Revision

This decision sunsets the 1995 Land Protection Plan (1995 LPP) and adopts the revised 2012 Land Protection Plan (2012 LPP). The 2012 LPP will now function as the primary means by which the NPS will continue to implement land protection actions. The 2012 LPP provides the following goals to protect public land from incompatible forms of private development:

- Identify private developments most threatened by new floodplain conditions;
- Prevent structures and septic systems from entering the Stehekin River;
- Create new opportunities for land exchanges in sustainable areas outside the channel migration zone;
- Preclude the installation of more bank hardening and river manipulation; and
- Identify the relative priority and minimum interest in each parcel to guide NPS decisions if approached by a private property owner seeking to exchange or sell their property.

To achieve these goals, the revised LPP includes eight criteria to prioritize land for acquisition from willing sellers via land exchange, fee purchase, or purchase of scenic easements. Recent flooding has demonstrated that the 100-year floodplain, which was used to prioritize land in the 1995 LPP, does not accurately predict the flood threat in high velocity mountain rivers such as the Stehekin River.

Recognizing this, the 2012 LPP has expanded the prioritization process beyond the 100-year floodplain with prioritization criteria that include:

- active areas within the channel migration zone along the Stehekin River;
- alluvial fan migration zones;
- deposition zones within the Stehekin River floodplain; and
- active parts of debris cones.

These criteria address in a more holistic fashion the unstable features located at distinct points where the valley widens in McGregor Meadows; between the large tributary alluvial fans of Company, Boulder, and Rainbow Creeks; and at the Stehekin River mouth. Debris cones are dispersed throughout the lower valley and lakeshore.

The 2012 LPP places a greater priority on acquiring larger, undeveloped blocks of land within the valley via fee purchase or land exchange. Large undeveloped parcels are prioritized because principles of conservation biology generally indicate that larger patches of undeveloped habitat have greater conservation value.

The 2012 LPP continues to emphasize land exchanges as a land protection tool because they enable the NPS to work with landowners who want to avoid the threat of flooding but wish to remain in the Stehekin Valley. To facilitate land exchanges in a manner that protects the resources and values of Lake Chelan NRA, the NPS has identified new exchange parcels outside the channel migration zone and other hazard zones for potential exchange. Some lands previously considered suitable for exchange in the 1995 LPP have been removed from consideration in the 2012 LPP based on the NPS' enhanced understanding of flooding threats and awareness of resource functions and values that should remain protected within the public domain.

OTHER ALTERNATIVES CONSIDERED

Alternative 1: No Action—Continue Current Management Practices and Existing Plan Implementation

This alternative would maintain the Stehekin Valley Road in its current alignment, including raising the road grade through the floodplain of McGregor Meadows. The project details would follow the Selected Action described in the 2005 Stehekin Valley Road Improvement Environmental Assessment and Finding of No Significant Impact. Administrative facilities and staff housing in the floodplain would be relocated near the airstrip as called for by the 1995 General Management Plan (GMP) and in accordance with site-specific details provided by a pending Environmental Assessment. Policies for land acquisition would continue to be guided by the 1995 Land Protection Plan under this alternative. Erosion protection measures would be implemented at one site as part of the Stehekin Valley Road Improvement Project. However, erosion control measures would eventually need to be implemented at many sites because the risks to the road infrastructure, which partially prompted preparation of the SRCIP/EIS, would remain.

Alternative 2: At-Risk Public Facilities Removed from Channel Migration Zone Where Possible; More Priority Land Exchange/Acquisition in Channel Migration Zone (Environmentally Preferable)

This alternative was identified as the Preferred Alternative and the Environmentally Preferable Alternative in the Draft EIS. It is substantially similar to the Selected Action because the Stehekin Valley Road would be rerouted out of the floodplain / channel migration zone around McGregor Meadows and the Lower Field to provide a sustainable alignment; however, the road reroute around McGregor Meadows would not include a Mechanically Stabilized Earth (MSE) wall. Instead, the road would be slightly longer and the prism of road disturbance would be slightly wider to enable road construction and minimize steep grades. No spur road into the McGregor Meadows area would be constructed to provide motor vehicle access to private property owners or the public. Because no spur road would be constructed, no easement for motor vehicle access would be obtained from private property owners and no grade control structures would be built across the Stehekin Valley Road within McGregor Meadows to protect motor vehicle access to private property. The Land Protection Plan would place slightly less emphasis on the most flood threatened sites and would not factor in concerns for visual sensitivity. Instead, the LPP would focus on protecting ecological functions and values, as opposed to aesthetic values. The northern section of the Lower Valley Trail would wrap around the Stehekin Valley Ranch and would not include a multi-use (pedestrian, bicycle, horse) spur trail into the Buckner Homestead. New NPS housing would not be constructed elsewhere in the valley, but would be consolidated in the vicinity of the airstrip as per the 1995 Development Concept Plan and General Management Plan.

Alternative 3: At-Risk Public Facilities Removed from Channel Migration Zone in Most Areas; Same Land Protection Plan as Alternative 2.

Under Alternative 3, the Stehekin River would have slightly less room to meander within its natural channel migration zone compared to Alternative 2. Alternative 3 would reroute the Stehekin Valley Road

out of the channel migration zone around McGregor Meadows but not around the Lower Field. Erosion control measures would be implemented at Weaver Point (two barbs and logjam), the mouth of the Stehekin River (riprap and logjam), the mouth of Boulder Creek (logjam), Frog Island (logjam), Wilson Creek (logjam), and the Lower Field (two barbs). Administrative facilities in the floodplain, including housing, would be relocated near the airstrip. The Land Protection Plan would have the same policies and priorities as in Alternative 2. New campgrounds and recreational facilities would be similar to Alternative 2 but would include an additional campground constructed near the confluence of Company Creek and the Stehekin River. No raft takeout would be constructed near the mouth of the Stehekin River.

Alternative 4: At-Risk Public Facilities Removed from Channel Migration Zone in Some Areas; Less Priority Land Exchange / Acquisition in Channel Migration Zone.

Alternative 4 would manipulate the river more than the other alternatives except for Alternative 1 but would still enable some meandering of the Stehekin River within its channel migration zone. Similar to Alternative 1, Alternative 4 would maintain the current alignment of the Stehekin Valley Road but would raise the road grade through McGregor Meadows to reduce the future risk of flood damage. Compared to the other action alternatives, Alternative 4 would include installation of the greatest number of erosion management structures (16-17) to protect the Stehekin Valley Road in place. In addition, logjam manipulation would be authorized along a much broader reach of the Stehekin River, from the river mouth to Bullion Camp. Similar to the other alternatives, the administrative facilities in the floodplain would be relocated near the airstrip, and future housing for NPS employees would also be built there. Land protection priorities would be weighted slightly differently than in Alternatives 2 and 3, with more emphasis on acquiring land for public use and less emphasis on acquiring developed land. The Lower Valley Trail would be constructed as per Alternative 1, and other recreational facilities would be similar to the Selected Action.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Pursuant to the President's Council on Environmental Quality's guidance on the determination of the environmentally preferred alternative, such an alternative is that which will promote the national environmental policy as expressed in §101 of the National Environmental Policy Act. This section provides "...it is the continuing responsibility of the Federal Government to:

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
5. achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

Expressed more succinctly, the Environmentally Preferable Alternative is the course of action "that causes the least damage to the biological and physical environment" or which conversely "best protects, preserves, and enhances historic, cultural, and natural resources" (46 FR 18026 – 46 FR 18038).

As documented in the Draft and Final SRCIP/EIS, Alternative 2 was identified as the Environmentally Preferable Alternative because it would result in the least harm to the biological and physical environment primarily by protecting the ecological functions and values of the Stehekin River and its tributaries from

adverse impacts caused by NPS management actions to maintain public and administrative facilities, including the public transportation infrastructure. In addition, this alternative would protect a wider geographic area of the valley from private development, by encouraging willing landowners to relocate from the channel migration zone and other segments with unstable landforms.

BASIS FOR DECISION

Legal and Policy Guidance Relevant to this Decision

In reaching this decision, the NPS considered the purposes for which Lake Chelan National Recreation Area was established, including its enabling legislation, legislative history, and the administrative provisions for Lake Chelan NRA provided by the Washington Park's Wilderness Act of 1988. The NPS also considered the Organic Act of 1916, NPS Management Policies (2006), the 1995 General Management Plan for Lake Chelan NRA and the 2012 Foundation Document for the North Cascades NPS Complex.

The NPS carefully reviewed the wide variety of federal and state laws and policies that specifically apply to lands within Lake Chelan NRA, as described in a whitepaper entitled Laws, Regulations and Policies Concerning Management of the Stehekin River Floodplain within Lake Chelan National Recreation Area provided in the Draft and Final EIS as Appendix 15. The whitepaper, prepared in consultation with state and federal agencies, describes the regulatory framework regarding conservation of riparian land, shoreline, and water resources. The NPS also carefully considered a whitepaper entitled Stehekin River Information Base, which summarizes the current state of knowledge about the Stehekin River and was incorporated in the Draft and Final EIS as Appendix 16. The concepts provided in this whitepaper substantially informed the planning process and environmental impact analysis.

The NPS also considered the guidance provided by the NPS Climate Change Response Strategy and related policy guidance. The Response Strategy encourages units of the National Park Service to respond proactively to climate change by taking management actions that will adapt to the future threats associated with climate change. This guidance was considered because climate change appears to be increasing the frequency and magnitude of flooding on the Stehekin River, and climate change predictions for the Pacific Northwest indicate flooding is likely to become more severe in the coming years.

Decision Criteria

Each of the alternatives in the SRCIP/FEIS was evaluated according to the degree to which they would achieve the goals of the planning process and resolve the issues that prompted preparation of the SRCIP/FEIS. The alternatives were also evaluated based on how much they would enable the river to utilize its floodplain and migrate within its channel migration zone. The planning goals included:

- Sustainably operate and maintain NPS administrative facilities, public access (roads and trails) and campgrounds;
- Protect water quality, scenic values, habitat, and natural processes of the Stehekin River; and
- Partner with the Stehekin Community to provide services, facilities, and experiences for visitors.

These goals are consistent with those developed in the 1995 General Management Plan and allow the NPS to respond to flood-related issues in the Stehekin River Valley. These issues arose from the passage of three large floods in 1995, 2003, and 2006, and appear to be related to the emerging impacts from a climate-induced shift in flooding on the Stehekin River. These issues are outlined in the following five sections.

Issue #1: Respond to the increased magnitude and frequency of flooding

Prior to the late 20th century, the Stehekin River was prone primarily to spring snowmelt flooding; however, since the 1970s, the Stehekin River has become prone to large fall rain-on-snow floods, which rise quickly and occur from mid-October through December. Hydrologic data collected by the U.S. Geological Survey on the river since 1911 confirm the significance of this shift. The severe floods in 1995, 2003, and 2006 have caused significant changes in the Stehekin River channel, redefined the boundaries for the 100-year flood, and underscored the need to include the channel migration zone to mitigate flood risk. As a result, recreational and administrative facilities and developments once thought to be safe from the river are now threatened by flooding, bank erosion, and channel migration, while other sites in the floodplain have been compromised by larger, more frequent floods. Considering the multifaceted approach to management that is outlined in the Selected Action – including the management of the river’s entire channel migration zone and the relocation of facilities out of the regulatory floodplain – the Selected Action provides the best means of protecting the NPS’ administrative and recreational infrastructure in the lower Stehekin Valley.

Issue #2: Implement and clarify 1995 General Management Plan (GMP) guidance.

The 1995 GMP identified the risks of flooding, but did not provide specific guidance for responding to the increased magnitude and frequency flooding that has occurred since the GMP was finalized. In addition, the GMP addressed flooding using the 100-year floodplain, which has proven to be an outdated planning tool for the highly dynamic aspects of flooding on the Stehekin River. The Selected Action best updates and clarifies the 1995 GMP guidance by replacing the 100-year floodplain with broader consideration of flood-threatened areas and landforms including the channel migration zone, alluvial fan migration zone, debris cone hazard zones, and depositional areas within the Stehekin River floodplain. Compared to other alternatives, the Selected Action includes the broadest emphasis on protecting areas most threatened by flooding to resolve this issue.

Issue #3: Sustain public facilities while protecting natural resources.

The Stehekin River is a fundamental natural resource for Lake Chelan NRA. Flood and erosion management measures to protect public facilities can substantially harm the ecological functions and services associated with the Stehekin River and its riparian zone. The Selected Action protects the river by 1) implementing ecologically sensitive erosion management measures, such as bank barbs, that minimize adverse impacts to fish and fish habitat; and 2) incorporating mitigation measures such as removal of riprap, use of woody debris for erosion management, and actively restoring riparian areas. In addition to using ecologically sensitive erosion management techniques to make public and administrative facilities more resistant to flooding, the Selected Action provides the most optimal adaptation strategies by relocating other facilities away from areas where the flood risk cannot be mitigated without causing unacceptable impacts to Stehekin River and its riparian zone.

Rerouting the Stehekin Valley Road around McGregor Meadows deserves special consideration because this action will adversely impact approximately 13 acres of upland, relatively undisturbed forest in exchange for minimizing impacts to the Stehekin River and its riparian zone. This decision represents a difficult conservation tradeoff because the road will be rerouted through northern spotted owl habitat and will adversely affect this federally-listed threatened species. The Selected Action has been modified to minimize adverse impacts to northern spotted owl habitat by constructing a Mechanically Stabilized Earth (MSE) wall to narrow the width of the road prism. Other measures as described in the “Measures to Minimize Environmental Harm” section will also be employed during road construction to lessen harm to spotted owls should surveys prior to project implementation encounter spotted owls in the area. The Biological Opinion (BO) for formal consultation associated with the northern spotted owl indicated that

“...the [U.S. Fish and Wildlife] Service concludes... implementation of the Project is not likely to jeopardize the continued existence of the northern spotted owl. . .” The BO is provided in the SRCIP/FEIS as Appendix 20.

Issue #4: Manage limited funding

The NPS has spent over \$2 million in emergency repairs to roads and park facilities since 2003 in response to the escalating impacts of flooding and erosion on the Stehekin River. Looking ahead, it is unsustainable for the NPS to continue to pursue funding to repair flood damage on a case-by-case basis without mitigating the underlying risks that have caused flood damage. The Selected Action will proactively implement a comprehensive set of actions and policies that will minimize the risk of future flood damage and reduce future costs for park operations. These fiscally responsible adaptation strategies will sustain the administrative and transportation infrastructure and reduce the need for future emergency funding. This plan will also increase the resilience of the ecosystem and help mitigate the impending risks of increased flooding caused by climate change.

Issue #5: Respond to private landowners

The Selected Action responds to the concerns of private landowners and residents by providing technical assistance, resources such as woody debris for erosion control and advance flood protection measures, and revising the Land Protection Plan to place a higher priority on geologically hazardous and flood-prone areas. The NPS does not intend to acquire all of the private property within the valley. Instead, the revised LPP focuses land protection priorities primarily upon flood-prone areas, such as McGregor Meadows, where the flood risk to private development poses the greatest threat to adjacent public land and water resources. These revised priorities may help landowners understand the relative risks to their property and help to encourage landowners to avoid development within, or to relocate away from, hazardous areas. In the short term, continuing to emphasize land exchanges will also help the NPS respond to landowners who want to avoid risks associated with flooding but wish to remain in the Stehekin Valley.

MEASURES TO MINIMIZE ENVIRONMENTAL HARM

Attachment B summarizes the best management practices, monitoring and mitigation measures that will be used to avoid or minimize environmental harm associated with the management actions that will be implemented under this decision. The responsible parties for implementing these measures include North Cascades National Park Service Complex (NOCA), Pacific West Regional Office (PWRO), Denver Service Center (DSC), Federal Highway Administration (FHWA) and contractors (CON).

PUBLIC ENGAGEMENT AND AGENCY COORDINATION

Throughout the planning process, several local, state, and federal agencies were kept apprised of project development via a non-advisory technical committee. This committee included representatives from Chelan County, Chelan Public Utility District, Washington State Department of Fish and Wildlife, Washington State Department of Ecology, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers.

The NPS also created a project website (www.nps.gov/noca/srcip) through the Planning, Environment, and Public Comment (PEPC) web-based system in January 2008 as one means of providing planning information and documents to the public, including forums for commenting on the plan when appropriate. The PEPC site and the park website (www.nps.gov/noca) were periodically updated throughout the planning process with supplemental materials and the draft and final plans.

During the following phases of public engagement, the public was invited to submit comments to the NPS via mail (North Cascades NPS Complex, Attn: SRCIP-EIS, 810 State Route 20, Sedro-Woolley, WA 98284), fax (360-856-1934), email, and the project website (www.nps.gov/noca/srcip).

Public Scoping

The Notice of Intent to prepare the SRCIP/EIS was published in the *Federal Register* on February 27, 2008. Preliminary information was distributed on January 7, 2008 via a press release (sent to Seattle Times, Seattle Post Intelligencer, Chelan Mirror, Wenatchee World, Associated Press, Everett Herald, River Post, Argus, Spokane Chronicle, Bellingham Herald, Skagit Valley Herald, and Lynden Tribune) and public scoping newsletter that was distributed to approximately 350 people on Lake Chelan NRA's mailing list and made available in park visitor centers.

The formal public scoping period ended on March 31, 2008. During this time, the NPS held three public open house meetings in Stehekin (January 22, 2008), Wenatchee (January 23, 2008) and Seattle (January 24, 2008). At these meetings, NPS staffs introduced the project, gave presentations on scientific data, answered questions, and accepted comments. The public was also encouraged to provide comments in writing.

Approximately 73 people attended the public meetings, and approximately 226 comments were recorded on flip charts at the meetings. Later, 21 public comment letters were also received, including letters from individuals, nonprofit organizations, and one business. With the exception of concerns outside the scope of the plan, these comments were used to inform preparation of the preliminary alternatives.

After the public scoping comments were analyzed, a postcard was mailed to the recipients of the original newsletter, including those who attended the public meetings and provided comments, announcing that a comment summary report was available on the park and project websites. This postcard also notified the public that the process of developing alternative management strategies was beginning.

Alternatives Scoping

A second newsletter was distributed to the public in summer 2008 that described the results of public scoping in more detail and identified a range of preliminary alternatives. It was sent to the project mailing list, including the same individuals and organizations from the original mailing, plus the additional individuals, organizations, and businesses who commented during public scoping. A second press release was also distributed at this time (to the same recipients of the news release announcing the initial public scoping process). Release of this second newsletter and press release initiated further public scoping on preliminary management alternatives. Three public open houses were held: two in Stehekin (August 26 - 27, 2008) and one in Seattle (August 28, 2008). Afterwards, 17 additional comment letters were received from individuals, nonprofit organizations, the Stehekin School District, Chelan County, and two businesses. These letters contained approximately 65 comments which were considered in crafting the revised alternatives and are identified in Chapter II of the Draft and Final EIS.

Draft Environmental Impact Statement Public Review

The EPA's notice of filing and release of the Draft EIS was published in the *Federal Register* on September 3, 2010 (the park's notice of availability was published on September 7, 2010). On February 11, 2011, the public comment period for the Draft EIS closed after an extended 150-day public review period, a two-day open house in Stehekin (September 29-30, 2011), and seven public meetings in Stehekin (October 19, 2010 and January 10, 2011), Wenatchee (October 20, 2010), Seattle (October 21, 2010), and Sedro-Woolley (January 12, 2011).

Two interviews were provided by the SRCIP project manager to GoLakeChelan.com, an online forum for news about the region, and audio and written versions of these interviews were provided on the organization's website during the 150-day public comment period. The superintendent and the project manager also gave briefings for a variety of community groups and organizations, including Chelan County Commissioners, state and federal representatives, and the Provincial Advisory Committee, which included representatives from the Okanogan-Wenatchee National Forest, among other participants.

Approximately 140 copies of the Draft EIS, 400 Executive Summaries of the Draft EIS, and 300 copies of the 2010 Draft Land Protection Plan were printed and distributed. Electronic versions of the document, both on CD-ROM and on the project website were also made available to the public.

A total of 872 pieces of correspondence were received on the Draft EIS, including 34 letters sent via the U.S. Postal Service, 78 PEPC comment letters, and 760 email comment letters (not including duplicates). Of these, 637 were sent through the National Parks Conservation Association, 19 were from members of the Backcountry Horsemen, and approximately 50 letters were from those affiliated with or who mentioned support of Stehekin Heritage comments. Two other form letters of unknown origin were also received (3 each of two different letters).

Individual substantive and non-substantive comments were identified from the letters. In all, approximately 1,361 individual comments were identified, of which approximately 574 were identified as non-substantive (outside the scope of the EIS or opinions). The other (substantive) comments were combined into similar categories or concern statements.

A total of 173 concern statements were initially developed in response to public comments. Of these, 57 (or 43 percent) were related to the Land Protection Plan (most of which were about land exchanges or the priorities of the plan); 30 were related to potential impacts; 19 were related to erosion management measures; 19 were related to recreational facilities; 16 were related to the reroute; 14 were related to the maintenance / housing area; and others offered new information or alternative options or identified a series of concerns related to things such as the purpose and need of the plan, the planning process, and use of materials. Eventually, some additional combination and splitting of comment categories resulted in the 182 substantive concern statements that the NPS responded to in the SRCIP/FEIS, Appendix 21.

A printed set of comments received on the plan continues to be available for public review at the Golden West Visitor Center in Stehekin and at the North Cascades NPS Complex headquarters in Sedro-Woolley. These public comments are also available online at <http://parkplanning.nps.gov/noca>.

Release of Final Environmental Impact Statement

The NPS released the SRCIP/FEIS on July 12, 2012. The full document was mailed to approximately 64 agencies, organizations, and individuals. Another approximately 340 organizations, businesses, and individuals received a CD-ROM version of the document as well as the executive summary of the plan. Both the printed and CD-ROM versions of the SRCIP/FEIS included Volumes I and II, the Land Protection Plan, and an Executive Summary as well as the park's cover letter. The NPS also sent the full document and CD-ROM to representatives of five local tribes. The NPS hosted public information meetings in Stehekin (August 6) and Seattle (August 7) to highlight the SRCIP/FEIS and to answer questions. The 30 day no-action "waiting period" for the SRCIP/FEIS was officially initiated by the EPA's publication of their notice of filing in the *Federal Register* on October 12, 2012 (the NPS's Notice of Availability was published in the *Federal Register* on October 10, 2012).

Subsequent to the release of the SRCIP/FEIS, two pieces of correspondence were received. A letter from Congressman Doc Hastings to NPS Director Jonathan Jarvis (received in August 2012) (a) commended the NPS desire to improve access and reduce maintenance costs associated with flooding; (b) noted the significant changes in management that would occur, including changes in land acquisition and transfer; (c) expressed concern for the very large size of the document; and (d) requested a minimum of 30-days additional time for his constituents to review the SRCIP/FEIS. A second letter was received via email from a Stehekin property owner who sought to clarify ownership and property lines associated with one lower Stehekin Valley parcel. No substantive new environmental information was provided in these correspondences.

CONCLUSION

Among the alternatives considered, the Selected Action best protects the Stehekin River and the resources and values of Lake Chelan National Recreation Area, while also improving the range of high quality visitor experiences. The Selected Action meets the SRCIP goals, statutory and policy requirements for managing Lake Chelan National Recreation Area, as well as national environmental policy goals. The official responsible for implementing the approved Stehekin River Corridor Implementation Plan is the Superintendent, North Cascades National Park Service Complex.

APPROVED: 

Date: 03/14/13

Christine S. Lehnertz
Regional Director, Pacific West Region